

**IN THE CLAIMS:**

Please amend claims 1-15 and as follows:

1. (Currently Amended) A personal identification apparatus comprising:
  - a light source which irradiates a finger;
  - an imaging unit which captures a transmitted light from the finger;
  - an image processing unit which extracts a blood vessel pattern from a image captured with the imaging unit, and compares the blood vessel pattern with a registered blood vessel pattern; and
  - a fixing device which doesn't contact a surface from which the transmitted light passed and contacts a part of the finger;wherein the light source comprises light-emitting elements arranged according to the shape of the finger as the to be captured.
2. (Currently Amended) The personal identification apparatus according to claim 1[[:]], wherein the light-emitting devices are arranged in the long direction of the finger.
3. (Currently Amended) The personal identification apparatus according to claim 1[[:]], wherein the light-emitting devices ~~are arranged~~ are near-infrared light emitting diodes.
4. (Currently Amended) The personal identification apparatus according to claim 1[[:]], wherein the light-emitting devices emit near-infrared laser beams.
5. (Currently Amended) The personal identification apparatus according to claim 1[[:]], wherein the light-emitting devices are arranged planimetrically.
6. (Currently Amended) The personal identification apparatus according to claim 1[[:]], wherein the light-emitting devices are arranged on the straight line.
7. (Currently Amended) The personal identification apparatus according to claim 1[[:]], further comprising:
  - a memory which stores the registered blood vessel patterns;
  - wherein image processing unit authenticates the validity of the user based on comparing the extracted blood vessel patterns with the registered blood vessel patterns stored in the memory.
8. (Currently Amended) The personal identification apparatus according to claim 3[[:]], wherein ~~each contiguous part of~~ the near-infrared light emitting diodes are ~~coherent in~~ close contact with each other.
9. (Currently Amended) The personal identification apparatus according to claim 3[[:]], wherein each contiguous part of the near-infrared light emitting diodes has a flat

surface configuration.

10. (Currently Amended) The personal identification apparatus according to claim 1[[]], wherein a light source irradiates a dorsum of the finger.
11. (Currently Amended) The personal identification apparatus according to claim 1[[]], wherein the fixing device is a pin.
12. (Currently Amended) The personal identification apparatus according to claim 1[[]], further comprising ~~wherein the~~ personal information input means for selecting the registered blood vessel pattern.
13. (Currently Amended) The personal identification apparatus according to claim 12[[]], wherein the personal information input means is a voice input means or a IC card or a keyboard.
14. (Currently Amended) The personal identification apparatus according to claim 1[[]], wherein the image processing unit compares the extracted blood vessel pattern with the registered blood vessel pattern stored on a fixed medium connected to the authentication server or medium containing semiconductor memory or a portable medium.
15. (Currently Amended) A personal identification apparatus comprising:
  - a light source which irradiates a capturing part of a finger at a distance;
  - an imaging unit which detects a transmitted light through the capturing part and captures the capturing part;
  - an image processing unit which extracts blood vessel patterns from a image captured with the imaging unit, and compares the blood vessel patterns with a pre-registered blood vessel patterns;
  - a fixing device which doesn't contact a surface from which the transmitted light passed and contacts a part of the finger;
  - wherein the light source comprises light-emitting devices arranged according to the shape of the finger ~~as the~~ to be captured.